## **EAST Search History**

## **EAST Search History (Prior Art)**

Ref#	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	987	((lithium potassium sodium copper zinc magnesium calcium barium iron cerium) near hydroxide) near5 (particle near size)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2010/03/26 23:39
L2	234	1 and (lubrica\$5 (liquid near fuel))	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2010/03/26 23:40
L3	200	1 and (lubricant (liquid near fuel))	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2010/03/26 23:41
L4	9	3 and (lithium near hydroxide)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2010/03/26 23:41
L5	365	1 and slurry	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2010/03/27 00:05
L6	42	3 and slurry	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2010/03/27 00:05
S1	13	("2394907"   "2434539"   "3525599"   "3547605"   "4200544").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2008/12/20 12:50
<b>S</b> 2	13	("2394907"   "2434539"   "3525599"   "3547605"   "4200544").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 02:02

S3	13	S2	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 02:02
S4	0	S3 and (fuel and metal and water and surfactant)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 02:03
S5	8	S3 and (fuel metal water surfactant)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 02:04
S6	13	S3 S5	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 02:04
S7	4	S6 and (hydroxide)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 02:04
S8	13	S6 S7	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 02:04
S9	0	S8 and lipophilic	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 02:05
S10	1	"10598577"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 02:05
S11	1	S10 and lipophilic	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 02:06
S12	0	S8 and (hlb)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 02:06
S13	23204	(hydrophilic near lipophilic near balance) (HLB)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 02:07

S14	570	S13 and (fuel and metal and water and surfactant)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 02:08
S15	284	S14 and (hydroxide)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 02:08
S16	145	S15 and (lipophilic and hydrophilic)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 02:09
S17	18	S16 and (organic near medium)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 02:10
S18	9	S17 and (carboxylic near acid)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 02:10
S19	18	S18 S17	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 02:10
\$20	18	S19 and (mix\$3 grind\$3 (rotor near stator) (vertical near bead) (horizontal near bead) (basket near mill\$3) (pearl near mill\$3) (demulsifier) (poly\$1olefin) (hydrocarbyl near benzene near sul \$2onic) sul\$2on\$3 alkal\$3 dispersion slurry)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13
S21	23211	(hydrophilic near lipophilic near balance) (HLB)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 03:16
S22	570	S21 and (fuel and metal and water and surfactant)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 03:16

S23	284	S22 and (hydroxide)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 03:16
S24	145	S23 and (lipophilic and hydrophilic)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 03:16
S25	144	S24 and (mix\$3 grind\$3 (rotor near stator) (vertical near bead))	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 03:17
S26	3	S25 and ((horizontal near bead) (basket near mill\$3) (pearl near mill\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 03:18
S27	144	S24 and (mix\$3 grind\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 03:18
S28	144	S26 S27	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 03:19
S29	12	S28 and ((rotor near stator) (vertical near bead))	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 03:19
S30	144	S29 S28	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 03:19
S31	14	S30 and (demulsifier)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 03:20
S32	144	S31 S30	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 03:21
S33	36	S32 and (poly \$1olefin)	US-PGPUB; USPAT; USOOR; EPO; JPO	OR	ON	2009/01/13 03:21

S34	144	S32 S33	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 03:21
S35	117	S34 and ((hydrocarbyl near benzene near sul \$2onic) sul\$2on\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 03:22
S36	0	S34 and (hydrocarbyl near benzene near sul \$2onic)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 03:22
S37	114	S34 and (hydrocarbyl benzene)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 03:23
S38	144	S37 S35 S34	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 03:23
S39	138	S38 and (alkal\$3 dispersion)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 03:23
S40	144	S38 S39	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 03:24
S41	39	S40 and (slurry)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 03:24
S42	144	S41 S40	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 03:24
S43	18	S42 and (organic near medium)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 03:25
S44	3	S29 and S31 and S33 and S35 and S37 and S39 and S41 and S43	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 03:27

S45	102	S35 and S37 and S39	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 03:28
S46	30	S45 and S41	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 03:29
S47	7	S46 and S33	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 03:30
S48	30	S46 S47	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 03:31
S49	9	S48 and S43	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 03:32
S50	30	S49 S48	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 03:32
S51	5	S50 and S31	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 03:33
S52	30	S51 S50	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 03:33
S53	6	S52 and S29	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 03:33
S54	14	S47 S49 S51 S53	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 03:34
S55	11	S54 not S44	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 03:38

S56	27	S52 not S44	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 03:40
S57	9	S24 and (grind\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 03:45
S58	1	S57 and S56	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 03:46
S59	1	"10598577"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 04:17
S60	7239	(dispersion near composition) and (fuel metal water surfactant)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 04:20
S61	548	S60 and ((hydrophilic near lipophilic near balance) (HLB))	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 04:21
S62	9	S61 and (fuel and metal and water and surfactant)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 04:21
S63	254	S61 and (hydroxide)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 04:45
S64	254	S63 and (mix\$3 grind\$3 (rotor near stator) (vertical near bead) (horizontal near bead) (basket near mill\$3) (pearl near mill\$3) (demulsifier) (poly\$1olefin) (hydrocarbyl near benzene near sul \$2onic) sul\$2on\$3 alkal\$3 dispersion slurry)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13

S65	245	S63 and (grind\$3 (rotor near stator) (vertical near bead) (horizontal near bead) (basket near mill\$3) (pearl near mill\$3) (demulsifier) (poly\$1olefin) (hydrocarbyl near benzene near sul \$2onic) sul\$2on\$3 alkal\$3 slurry)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	0 0 1	2009/01/13 04:47
S66	106	S63 and (grind\$3 (rotor near stator))	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 04:48
S67	8	S66 and ((vertical near bead) (horizontal near bead) bead) (basket near mill\$3) (pearl near mill\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 04:48
S68	5	S67 and ((demulsifier) (poly \$1olefin))	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 04:49
S69	17	S66 and ((demulsifier) (poly \$1olefin))	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 04:51
S70	0	S66 and (hydrocarbyl near benzene near sul \$2onic)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 04:51
S71	19	S66 and (benzene near sul\$2onic)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 04:54
S72	103	S66 and (sul\$2on\$3 alkal\$3 slurry)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 04:55
S73	2	S69 and S71	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 04:56

S74	34	S69 S71	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 04:56
S75	34	S74 and (fuel metal water surfactant)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 04:59
S76	2	S74 and (fuel)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 04:59
S77	13	("2394907"   "2434539"   "3525599"   "3547605"   "4200544").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 05:14
S78	73	"3865737"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/01/13 12:32
S79	1	(10/598577).APP.	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2009/08/25 15:19
80 80	416	((lithium near hydroxide) (lithium near hydroxide near monohydrate) (magnesium near hydroxide) (calcium near hydroxide) (lithium near carbonate) (calcium near carbonate) (copper near acetate) (magnesium near carbonate) (calcium near oxide) (magnesium near oxide) (magnesium near oxide) (lithium near oxide) (cerium near oxide) (cerium near oxide) (iron near oxide)) adj (nano\$5 micro\$5)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	0 0 2	2009/08/25

S81	301	S80 and (dispers\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/08/25 15:26
S82	0	S81 and (additive near (lubricant and fuel))	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/08/25 15:27
S83	0	S81 and (additive adj (lubricant and fuel))	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/08/25 15:27
S84	8	S81 and (additivesame (lubricant and fuel))	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/08/25 15:27
S85	2	S81 and (additive same (lubricant and fuel))	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/08/25 15:27
S86	18	S81 and (mean near particle)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/08/25 16:24
S87	9	((lithium near hydroxide) (lithium near hydroxide near monohydrate) (magnesium near hydroxide) (calcium near hydroxide) (lithium near carbonate) (calcium near carbonate) (copper near acetate) (magnesium near carbonate) (magnesium near oxide) (magnesium near oxide) (lithium near oxide) (lithium near oxide) (cerium near oxide) (ron near oxide) (ron near oxide) near (mano\$5 micro\$5)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/08/25

S88	177	((lithium near hydroxide) (lithium near hydroxide near monohydrate) (magnesium near hydroxide) (calcium near hydroxide) (lithium near carbonate) (calcium near carbonate) (copper near acetate) (magnesium near carbonate) (calcium near oxide) (magnesium near oxide) (magnesium near oxide) (lithium near oxide) (cerium near oxide) (cerium near oxide) (iron near oxide)) same ((mean near particle) near (nano \$5 micro\$5))	US-PGPUB; USPAT; USOCR; EPO; JPO		ON	2009/08/25
S89	0	S88 and ("44"/. clas.)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/08/25 16:36
S90	0	S88 and ("44"/. clas.)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/08/25 16:36
S91	0	S88 and ("508"/. clas.)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/08/25 16:37
S92	0	S88 and ((fuel near additive) and dispers \$3)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/08/25 16:41
S93	1	S88 and (fuel and dispers\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/08/25 16:43

S94	177	((lithium near hydroxide) (lithium near hydroxide near monohydrate) (magnesium near hydroxide) (calcium near hydroxide) (lithium near carbonate) (calcium near carbonate) (copper near acetate) (magnesium near oxide) (magnesium near oxide) (magnesium near oxide) (lithium near oxide) (cerium near oxide) (cerium near oxide) (iron near oxide) (iron near oxide)) same ((mean near particle) near (nano \$5 micro\$5))	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/08/25
S95	177	S94	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/08/25 19:34
S96	0	S94 and (metal near base)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/08/25 19:36
S98	97	S94 and surfactant	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/08/25 19:51
S99	3	((lithium near hydroxide) (lithium near hydroxide near monohydrate) (magnesium near hydroxide) (calcium near hydroxide) (lithium near carbonate) (calcium near carbonate) (copper near acetate) (magnesium near carbonate) (calcium near oxide)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2009/08/25

0; 0; 0; (() p;	nagnesium near ide) (lithium near ide) (cerium near ide) (iron near ide)) same mean near urticle) near (nano imicro\$5)) same	***************************************
-----------------------------	---	---

3/27/2010 12:40:26 AM C:\ Documents and Settings\ Cfergusongraham\ My Documents\ EAST\ Workspaces \ 10598577.wsp